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they shall be rebonded within three working shifts.

#### §56.12045 Overhead powerlines.

Overhead high-potential powerlines shall be installed as specified by the National Electrical Code.

#### §56.12047 Guy wires.

Guy wires of poles supporting highvoltage transmission lines shall meet the requirements for grounding or insulator protection of the National Electrical Safety Code, part 2, entitled "Safety Rules for the Installation and Maintenance of Electric Supply and Communication Lines" (also referred to as National Bureau of Standards Handbook 81, November 1, 1961) and Supplement 2 thereof issued March 1968, which are hereby incorporated by reference and made a part hereof. These publications and documents may be obtained from the National Institute of Science and Technology, 100 Bureau Drive. Stop 3460. Gaithersburg. MD 20899-3460. Telephone: 301-975-6478 (not a toll free number); http:// ts.nist.gov/nvl; or from the Government Printing Office, Information Dissemination (Superintendent of Documents), P.O. Box 371954, Pittsburgh, PA 15250-7954; Telephone: 866-512-1800 (toll free) or 202-512-1800, http://bookstore.gpo.gov, or may be examined in any Metal and Nonmetal Mine Safety and Health District Office of the Mine Safety and Health Administration.

[50 FR 4054, Jan. 29, 1985, as amended at 60 FR 35695, July 11, 1995; 71 FR 16667, Apr. 3, 20061

### § 56.12048 Communication conductors on power poles.

Telegraph, telephone, or signal wires shall not be installed on the same crossarm with power conductors. When carried on poles supporting powerlines, they shall be installed as specified by the National Electrical Code.

#### §56.12050 Installation of trolley wires.

Trolley wires shall be installed at least seven feet above rails where height permits, and aligned and supported to suitably control sway and sag.

### § 56.12053 Circuits powered from trolley wires.

Ground wires for lighting circuits powered from trolley wires shall be connected securely to the ground-return circuit.

### § 56.12065 Short circuit and lightning protection.

Powerlines, including trolley wires, and telephone circuits shall be protected against short circuits and lightning.

### § 56.12066 Guarding trolley wires and bare powerlines.

Where metallic tools or equipment can come in contact with trolley wires or bare powerlines, the lines shall be guarded or deenergized.

### § 56.12067 Installation of transformers.

Transformers shall be totally enclosed, or shall be placed at least 8 feet above the ground, or installed in a transformer house, or surrounded by a substantial fence at least 6 feet high and at least 3 feet from any energized parts, casings, or wiring.

### § 56.12068 Locking transformer enclosures.

Transformer enclosures shall be kept locked against unauthorized entry.

# § 56.12069 Lightning protection for telephone wires and ungrounded conductors.

Each ungrounded power conductor or telephone wire that leads underground and is directly exposed to lightning shall be equipped with suitable lightning arrestors of approved type within 100 feet of the point where the circuit enters the mine. Lightning arrestors shall be connected to a low resistance grounding medium on the surface and shall be separated from neutral grounds by a distance of not less than 25 feet.

# § 56.12071 Movement or operation of equipment near high-voltage power

When equipment must be moved or operated near energized high-voltage powerlines (other than trolley lines) and the clearance is less than 10 feet,

#### § 56.13001

the lines shall be deenergized or other precautionary measures shall be taken.

# Subpart L—Compressed Air and Boilers

### § 56.13001 General requirements for boilers and pressure vessels.

All boilers and pressure vessels shall be constructed, installed, and maintained in accordance with the standards and specifications of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code.

## § 56.13010 Reciprocating-type air compressors.

(a) Reciprocating-type air compressors rated over 10 horsepower shall be equipped with automatic temperature-actuated shutoff mechanisms which shall be set or adjusted to the compressor when the normal operating temperature is exceeded by more than 25 percent.

(b) However, this standard does not apply to reciprocating-type air compressors rated over 10 horsepower if equipped with fusible plugs that were installed in the compressor discharge lines before November 15, 1979, and designed to melt at temperatures at least 50 degrees below the flash point of the compressors' lubricating oil.

### §56.13011 Air receiver tanks.

Air receiver tanks shall be equipped with one or more automatic pressure-relief valves. The total relieving capacity of the relief valves shall prevent pressure from exceeding the maximum allowable working pressure in a receiver tank by not more than 10 percent. Air receiver tanks also shall be equipped with indicating pressure gauges which accurately measure the pressure within the air receiver tanks.

### §56.13012 Compressor air intakes.

Compressor air intakes shall be installed to ensure that only clean, uncontaminated air enters the compressors.

#### § 56.13015 Inspection of compressedair receivers and other unfired pressure vessels.

(a) Compressed-air receivers and other unfired pressure vessels shall be

inspected by inspectors holding a valid National Board Commission and in accordance with the applicable chapters of the National Board Inspection Code, a Manual for Boiler and Pressure Vessel Inspectors, 1979. This code is incorporated by reference and made a part of this standard. It may be examined at any Metal and Nonmetal Mine Safety and Health District Office of the Mine Safety and Health Administration, and may be obtained from the publisher, the National Board of Boiler and Pressure Vessel Inspector, 1055 Crupper Avenue, Columbus, Ohio 43229.

(b) Records of inspections shall be kept in accordance with requirements of the National Board Inspection Code, and the records shall be made available to the Secretary or his authorized representative.

# § 56.13017 Compressor discharge pipes.

Compressor discharge pipes where carbon build-up may occur shall be cleaned periodically as recommended by the manufacturer, but no less frequently than once every two years.

### §56.13019 Pressure system repairs.

Repairs involving the pressure system of compressors, receivers, or compressed-air-powered equipment shall not be attempted until the pressure has been bled off.

#### §56.13020 Use of compressed air.

At no time shall compressed air be directed toward a person. When compressed air is used, all necessary precautions shall be taken to protect persons from injury.

### § 56.13021 High-pressure hose connections.

Except where automatic shutoff valves are used, safety chains or other suitable locking devices shall be used at connections to machines of highpressure hose lines of ¾-inch inside diameter or larger, and between high-pressure hose lines of ¾-inch inside diameter or larger, where a connection failure would create a hazard.

### §56.13030 Boilers.

(a) Fired pressure vessels (boilers) shall be equipped with water level